

## **Return on Investment (ROI) Program Funding Application**

This template was built using the ITD ROI Submission Intranet application.

**FINAL AUDIT REQUIRED:** The Enterprise Quality Assurance Office of the Information Technology Department is required to perform post implementation outcome audits for all Pooled Technology funded projects and may perform audits on other projects.

This is a Pooled Technology Fund Request. Amount of funding requested: \$228,225.00

### **Section I: Proposal**

**Date:** 7/15/2004  
**Agency Name:** Iowa Communications Network  
**Project Name:** Capitol Complex PBX Technology Upgrade  
**Agency Manager:** Kathy Williams  
**Agency Manager Phone Number / E-Mail:** (515)725-4640 / kathy.williams@iowa.gov  
**Executive Sponsor (Agency Director or Designee):** John Gillispie (ICN)

#### **A. Project Summary**

Describe the nature and use of the proposed project, including what is to be accomplished, how it will be accomplished, and what the costs and benefits will be.

**Response:**

The aging of the Capitol Complex Telecommunication Systems have been a top design priority for a number of years. The ICN has looked at the funds involved, advanced services desired by the customers, and what systems/hardware that is available to do the job that is required. This project is Phase I of a three-phased project. Phase I will update the technology to approximately 3000 users of the Capitol Complex Telecommunication System. Over the next three years, all users will have the enhanced services that will be required to serve the people of Iowa. The burden to agencies to do more with less will dictate that enhanced services need to be provided to streamline all aspects of State Government services that are required. Integrated access to information while talking to clients, automated systems for callers to retrieve information without using state personnel resources, and more efficient use of network bandwidth resources are just a few of the benefits to an upgraded system. The ICN is not funded by State General Fund dollars. All operational capitol is derived from customer services billings.

#### **B. Strategic Plan**

How does the proposed project fit into the strategic plan of the requesting agency?

**Response:**

The ICN's Mission and Core Function statements are as follows: Mission: To provide authorized users the highest quality and technologically advanced education, medical, judicial and governmental telecommunication services. Core Function: To integrate private and public telecommunications capabilities to produce cost effective finished services to support the requirements of authorized users in education, medical, judicial and government.

#### **C. Current Technology**

Provide a summary of the technology used by the current system. How does the proposed project impact the agency's technological direction?

**Response:**

The current system was installed in 1989 and has continued to provide basic telecommunications services ever since. The system is comprised of several switching nodes of TDM (Time Division Multiplexing) technology. This technology uses a complete 64K channel to complete on voice connection. Although this technology is very stable and reliable, new services require the use of a more flexible way to complete voice calls while at the same time delivering data and video services to the user. These services cannot be provided by the currently installed legacy system. This project follows the ICN's technological direction by allowing more efficient use of the Network resources plus allowing the services to be non-site specific allowing transparent services over a wider area.

## **D. Statutory or Other Requirements**

Is this project or expenditure necessary for compliance with a Federal law, rule, or order?

☐ YES (If "Yes", cite the specific Federal law, rule or order, with a short explanation of how this project is impacted by it.)

**Explanation:**

Is this project or expenditure required by state law, rule or order?

☒ YES (If "YES", cite the specific state law, rule or order, with a short explanation of how this project is impacted by it.)

**Explanation:**

Chapter 8D.1

Does this project or expenditure meet a health, safety or security requirement?

☐ YES (If "YES", explain.)

**Explanation:**

Is this project or expenditure necessary for compliance with an enterprise technology standard?

☐ YES (If "YES", cite the specific standard.)

**Explanation:**

**[This section to be scored by application evaluator.]**

**Evaluation (20 Points Maximum)**

If the answer to these criteria is "no," the point value is zero (0). Depending upon how directly a qualifying project or expenditure may relate to a particular requirement (federal mandate, state mandate, health-safety-security issue, or compliance with an enterprise technology standard), or satisfies more than one requirement (e.g. it is mandated by state and federal law and fulfills a health and safety mandate), 1-20 points awarded.

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**E. Impact on Iowa's Citizens****a. Project Participants**

List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, other levels of government, etc.) and provide commentary concerning the nature of participant involvement. Be sure to specify who and how many **direct** users the system will impact. Also specify whether the system will be of use to other interested parties: who they may be, how many people are estimated, and how they will use the system.

**Response:**

The participant of the System includes all of the Capitol Complex employees as well as Agencies located throughout the Metro Area. This represents approximately 7000 telephone numbers.

All of the Agencies will be involved because of the new instruments that will be required to be replaced on each desk. The impact to the Agencies will be kept to a minimum in order for them continue to operate without interruption.

The system could be available to other Agency Offices outside of the metro area for traveling employees, enhanced services not available in their area, etc.

**b. Service Improvements**

Summarize the extent to which the project or expenditure improves service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

**Response:**

The System would provide enhanced services to State Agencies by allowing voice and data integration for the multiple call centers serving the public today. Reliable voice services will be maintained which will keep Agency frustration to a minimum.

**c. Citizen Impact**

Summarize how the project leads to a more informed citizenry, facilitates accountability, and encourages participatory democracy. If this is an extension of another project, what has been the adopted rate of

Iowa's citizens or government employees with the preceding project?

**Response:**

#### **d. Public Health and/or Safety**

Explain requirements or impact on the health and safety of the public.

**Response:**

**[This section to be scored by application evaluator.]**

##### **Evaluation (10 Points Maximum)**

- Minimally improves Customer Service (0-3 points).
- Moderately improves Customer Service (4-6 points).
- Significantly improves Customer Service (7-10 points).

**[This section to be scored by application evaluator.]**

##### **Evaluation (15 Points Maximum)**

- Minimally directly impacts Iowa citizens (0-5 points).
- Moderately directly impacts Iowa citizens (6-10 points).
- Significantly directly impacts Iowa citizens (11-15 points).

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#### **F. Process Reengineering**

Provide a pre-project or pre-expenditure (before implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens interact with the current system.

**Response:**

Provide a post-project or post-expenditure (after implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens will interact with the proposed system. In particular, note if the project or expenditure makes use

of information technology in reengineering traditional government processes.

**Response:**

**[This section to be scored by application evaluator.]**

**Evaluation (10 Points Maximum)**

- Minimal use of information technology to reengineer government processes (0-3 points).
- Moderate use of information technology to reengineer government processes (4-6 points).
- Significant use of information technology to reengineer government processes (7-10).

**G. Timeline**

Provide a projected timeline for this project. Include such items as planning, database design, coding, implementation, testing, conversion, parallel installation, and date of final release. Also include the parties responsible for each item.

**Response:**

This Phase of the total project will be complete by June 1, 2005. The total project should be completed by July1, 2007 depending on funding.

**[This section to be scored by application evaluator.]**

**Evaluation (5 Points Maximum)**

- The timeline contains several problem areas (0-2 points)
- The timeline seems reasonable with few problem areas (3-4 points)
- The timeline seems reasonable with no problem areas (5)

**H. Funding Requirements**

On a fiscal year basis, enter the estimated cost by funding source: Be sure to include developmental costs and ongoing costs, such as those for hosting the site, maintenance, upgrades, ...

	FY06		FY07		FY08	
	Cost(\$)	% Total Cost	Cost (\$)	% Total Cost	Cost (\$)	% Total Cost
State General Fund	\$0	0%	\$0	0%	\$0	0%
Pooled Tech. Fund /IowAccess Fund	\$228,225	50%	\$0	0%	\$0	0%
Federal Funds	\$0	0%	\$0	0%	\$0	0%
Local Gov. Funds	\$0	0%	\$0	0%	\$0	0%
Grant or Private Funds	\$0	0%	\$0	0%	\$0	0%
Other Funds (Specify)	\$225,000	50%	\$0	0%	\$0	0%
Total Project Cost	\$453,225	100%	\$0	100%	\$0	100%

Non-Pooled Tech. Total	\$225,000	50%	\$0	0%	\$0	0%
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**[This section to be scored by application evaluator.]**

**Evaluation (10 Points Maximum)**

- The funding request contains questionable items (0-3 points)
- The funding request seems reasonable with few questionable items (4-6 points)
- The funding request seems reasonable with no problem areas (7-10)

## I. Scope

Is this project the first part of a future, larger project?

☒ YES (If "YES", explain.) ☐ NO, it is a stand-alone project.

**Explanation:**

This project is Phase I of a three-phased project. Phase I will update the technology to approximately 3000 users of the Capitol Complex Telecommunication System. Over the next three years, all users will have the enhanced services that will be required to serve the people of Iowa.

Is this project a continuation of a previously begun project?

☐ YES (If "YES", explain.)

**Explanation:**

## J. Source of Funds

On a fiscal year basis, how much of the total project cost (\$ amount and %) would be absorbed by your agency from non-Pooled Technology and/or IOWAccess funds? If desired, provide additional comment / response below.

**Response:**

\$225,000 - 49.64% For all future Fiscal years the ICN will absorb all maintenance costs.

[This section to be scored by application evaluator.]

**Evaluation (5 Points Maximum)**

- 0% (0 points)
- 1%-12% (1 point)
- 13%-25% (2 points)
- 25%-38% (3 points)
- 39%-50% (4 points)
- Over 50% (5 points)

## Section II: Financial Analysis

### A. Project Budget Table

It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related.

The Total Annual Prorated Cost (State Share) will be calculated based on the following equation:

$$\left[ \left( \frac{\text{Budget Amount}}{\text{Useful Life}} \right) \times \% \text{ State Share} \right] + (\text{Annual Ongoing Cost} \times \% \text{ State Share}) = \text{Annual Prorated Cost}$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	\$0	1	0.00%	\$0	0.00%	\$0
Software	\$18,275	4	0.00%	\$0	0.00%	\$0
Hardware	\$434,950	5	51.70%	\$0	0.00%	\$45,235
Training	\$0	4	0.00%	\$0	0.00%	\$0
Facilities	\$0	1	0.00%	\$0	0.00%	\$0
Professional Services	\$0	4	0.00%	\$0	0.00%	\$0
ITD Services	\$0	4	0.00%	\$0	0.00%	\$0
Supplies, Maint, etc.	\$0	1	0.00%	\$0	0.00%	\$0
Other	\$0	1	0.00%	\$0	0.00%	\$0
<b>Totals</b>	<b>\$453,225</b>	<b>---</b>	<b>---</b>	<b>\$0</b>	<b>---</b>	<b>\$45,235</b>

## B. Spending Plan

Explain how the funds will be allocated.

Response:

The funds will be used to begin Phase I by replacing two nodes of the currently installed six node system. Also - The ICN is a non-funded state agency and is completely supported by customer billings. Therefore, all future maintenance costs will be absorbed by the ICN.

## C. Tangible and/or Intangible Benefits

Respond to the following and transfer data to the ROI Financial Worksheet as necessary:

**1. Annual Pre-Project Cost** - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation.

**Describe Annual Pre-Project Cost:**

Quantify Annual Pre-Project Cost:

	State Total
<b>FTE Cost (salary plus benefits):</b>	\$0.00
<b>Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):</b>	\$0.00
<b>Other Cost (expense items other than FTEs &amp; support costs, i.e. indirect costs if applicable, etc.):</b>	\$0.00
<b>Total Annual Pre-Project Cost:</b>	\$0.00

**2. Annual Post-Project Cost** - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process after project implementation.

**Describe Annual Post-Project Cost:**

Quantify Annual Post-Project Cost:

	State Total

<b>FTE Cost (salary plus benefits):</b>	\$0.00
<b>Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):</b>	\$0.00
<b>Other Cost (expense items other than FTEs &amp; support costs, i.e. indirect costs if applicable, etc.):</b>	\$0.00
<b>Total Annual Post-Project Cost:</b>	\$0.00

**3. Citizen Benefit** - Quantify the estimated annual value of the project to Iowa citizens. This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of \$10 per hour for citizen time.

Describe savings justification:

<b><u>Transaction Savings</u></b>	
Number of annual online transactions:	0
Hours saved/transaction:	0
Number of Citizens affected:	0
Value of Citizen Hour	0
Total Transaction Savings:	\$0
Other Savings (Describe)	\$0
<b>Total Savings:</b>	\$0

**4. Opportunity Value/Risk or Loss avoidance** - Quantify the estimated annual non-operations benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or Federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

**Response:**

**5. Benefits Not Readily Quantifiable** - List and summarize the overall non-quantifiable benefits (i.e., IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.).

**Response:**

Because of the aging of the technology and hardware of the currently installed system, there is a greater risk of failures with longer repair times. The new technology being proposed would be state of the art, current production year, and a complete warranty to ensure trouble free operation of current requirements as well as future Agency requirements for enhanced services.

The new technology will be used to enhance customer services, and also provide employees with enhanced features to work more efficiently.

It is difficult to quantify benefits in a case such as this but as an example if there were to be a complete outage of the system for a period of 1 hour, the loss of productivity for all of the metro area employees would be in excess of \$100,000 per hour.

The citizens of Iowa would not have access to any of the services they have come to depend on during an outage as well.

<b>ROI Financial Worksheet</b>	
A. Total Annual Pre-Project cost (State Share from Section II C1):	\$0
B. Total Annual Post-Project cost (State Share from Section II C2):	\$0
State Government Benefit (= A-B):	\$0
Annual Benefit Summary:	\$0
State Government Benefit:	\$0
Citizen Benefit:	\$0
Opportunity Value or Risk/Loss Avoidance Benefit:	\$100,000
C. Total Annual Project Benefit:	\$100,000
D. Annual Prorated Cost (From Budget Table):	\$45,235
<b>Benefit / Cost Ratio: (C/D) =</b>	2.21
<b>Return On Investment (ROI): ((C-D) / Requested Project Funds) * 100 =</b>	24.00%

**[This section to be scored by application evaluator.]**

#### **Evaluation (25 Points Maximum)**

- The financial analysis contains several questionable entries and provides minimal financial benefit to citizens (0-8 points).
- The financial analysis seems reasonable with few questionable entries and provides a moderate financial benefit to citizens (9-16 points).
- The financial analysis seems reasonable with no problem areas and provides maximum financial benefit to citizens (17-25).

Note: For projects where no State Government Benefit, Citizen Benefit, or Opportunity Value or Risk/Loss Avoidance Benefit is created due to the nature of the project, the Benefit/Cost Ratio and Return on Investment values are set to Zero.

## **Appendix A. Auditable Outcome Measures**

For each of the following categories, list the auditable metrics for success after implementation and identify how they will be measured.

### **1. Improved customer service**

## **2. Citizen impact**

## **3. Cost Savings**

## **4. Project reengineering**

## **5. Source of funds (Budget %)**

## **6. Tangible/Intangible benefits**

Because of the aging of the technology and hardware of the currently installed system, there is a greater risk of failures with longer repair times. The new technology being proposed would be state of the art, current production year, and a complete warranty to ensure trouble free operation of current requirements as well as future Agency requirements for enhanced services.

The equipment would also be IP enabled allowing key employees to have the same telephone number and features in multiple offices across the network.

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